

ABSTRACT OF THE DISCLOSURE

A radar device tracks with a high accuracy positions and velocities of a plurality of external targets that are close to each other and whose observed direction values are likely to be low. The radar device includes: a target tracking filter for calculating relative distances and relative velocities of a plurality of external targets by signal processing received signals from an antenna, for calculating the directions of the plurality of external targets by combining, among beam patterns radiated by the antenna, adjacent beam patterns that partially overlap, and for obtaining, from the directions and the relative distances and velocities, observed position values and observed velocity values of the plurality of external targets, to calculate, from the observed position values and the observed velocity values, smoothed values of the position and velocity for each of the external targets; and an intra-tracking-processing-cluster target tracking filter for forming a cluster from the plurality of external targets that are close to each other, for creating gates for the external targets in the cluster, different from those in the target tracking filter, and for performing a correlation process on the observed values of the external targets based on the gates.